

CLAIMS

1. A process for keeping chilled the food inside insulated trolleys (1) used on board aircraft,
5 wherein:
- each trolley (1) is equipped with a removable unit (11) that can be inserted in and removed from said trolley (1) as a single piece and that can produce cold inside the trolley, because said removable
10 unit (11) has at least one controllable reversible solid/gas adsorption reactor (13-16) containing a regeneratable adsorbent; and
- means for regenerating said adsorbent are provided on the ground, outside said aircraft.
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2. The process as claimed in claim 1,
wherein use is made of a plurality of identical interchangeable trolleys (1) and a plurality of identical interchangeable removable units (11).
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3. The process as claimed in claim 1,
wherein there are provided, at least at some of the stopovers made by said aircraft, identical interchangeable trolleys (1), identical
25 interchangeable removable units (11), and means for regenerating said adsorbent.
4. A trolley for implementing the process described in claim 1,
30 which comprises means (10) for receiving said removable unit (11) which can be inserted in and removed from said trolley (1) as a single piece.
5. The trolley as claimed in claim 4,
35 wherein said reception means (10) are of the drawer slideway type.
6. A removable unit for implementing the process described in claim 1, for the trolley of claim 4,

which has retention means (23, 24) which can cooperate with said reception means (10) on the trolley so as to removably insert said unit (11) in said trolley (1).

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7. The removable unit as claimed in claim 6, for the trolley of claim 5,

wherein said retention means (23, 24) are of the slide type and able to cooperate with said slideways (10).

8. The removable unit as claimed in claim 6, in which said reactor comprises a chamber (13) containing said adsorbent, a reservoir (14) containing a liquid whose vapor can be adsorbed by said adsorbent, and a controllable communication (15, 16, 17) between said chamber and said reservoir, which comprises a thermally insulating base plate (12), on either side of which are arranged said chamber (13) and said reservoir (14), said controllable communication (15, 16, 17) running from one side of said base plate (12) to the other.

9. The removable unit as claimed in claim 6, wherein said base plate (12) bears said retention means (23, 24) able to cooperate with said reception means (10) on the trolley (1).

10. The removable unit as claimed in claim 7, wherein said base plate (12) has two parallel opposite edges (23, 24) forming a slide and able to cooperate with said slideways (10) on said trolley (1), such that said removable unit (11) may be inserted in and removed from said trolley (1) like a drawer.

11. The removable unit as claimed in claim 6, in which said adsorbent may be regenerated by heating,

which comprises at least one electrical resistor (25, 26) for heating said adsorbent in order to regenerate it.

- 5 12. Adsorbent regeneration means for a removable unit
 (11) as claimed in claim 8, in which said adsorbent
 may be regenerated by heating,
 which comprise a open oven (27) closed by said base
 plate (12), so that only said chamber (13)
10 containing the adsorbent is heated by said oven,
 the reservoir (14) of said removable unit (11)
 being shielded from the heat of the oven by said
 base plate (12).
- 15 13. The regeneration means as claimed in claim 12,
 which comprise means (29, 30) for cooling said
 reservoir (14) while said adsorbent is being
 regenerated by heating.
- 20 14. The regeneration means as claimed in claim 12,
 wherein said open oven (27) is elongate, said means
 comprising means for moving said removable unit
 (11) from one end of said oven to the other while
 said adsorbent is regenerated.